

Table 4-1
Stations of Woodward Corridor Rapid Transit Concept
(North to South)

Location	Access
Pontiac Community Center	Auto, walk, bus
Square Lake Road	Auto, walk, bus
Long Lake Road	Auto, walk, bus
Big Beaver	Auto, walk, bus
Maple Road	Auto, walk, bus
14 Mile	Auto, walk, bus
13 Mile	Auto, walk, bus
12 Mile	Auto, walk, bus
11 Mile	Auto, walk, bus
10 Mile	Auto, walk, bus
9 Mile	Auto, walk, bus
8 Mile	Auto, walk, bus
7 Mile	Walk, bus
McNichols	Walk, bus
Woodland Avenue	Walk, bus
Trowbridge	Walk, bus
Hazelwood	Walk, bus
Mount Vernon	Walk, bus
Grand Boulevard	Walk, bus
Antoinette	Walk, bus
Warren	Walk, bus
Alexandrine	Walk, bus
Mack	Walk, bus
Alfred	Walk, bus
I-75	Walk, bus
Grand Circus Park	Walk, DPM
Campus/Martius	Walk, bus
Jefferson Avenue	Walk, bus

Source: The Corradino Group of Michigan, Inc.



4.2.1 Stations

The stations that are used for this analysis have access to the following intersecting bus routes, highways and nearby attractions (Figure 4-1 and Table 4-1).

Pontiac Transportation Center

- ✎ SMART Routes 275, 450, 752, 753 and 756 all stop at the Transportation Center. Route 450 is the Route running up Woodward Avenue.
- ✎ Amtrak, Greyhound and SMART all stop at the Transportation Center.
- ✎ From the Transportation Center passengers can make connections to North Oakland County Medical Center, Summit Place Mall and the Oakland County Service Center to the northwest and via SMART routes 450 and 752.
- ✎ The GM Pontiac Plant is located north of the Transportation Center with access via Smart Routes 752 or 753.
- ✎ The Phoenix Center is located on the east side of Woodward Avenue just two blocks from the Transportation Center along SMART Routes 753 and 756.
- ✎ GM Centerpoint Campus is located along the Woodward Corridor on South Boulevard between Martin Luther King Boulevard and Opdyke. It is currently served by SMART routes 465 and 756, intersecting Route 450 Pontiac at Auburn Road.
- ✎ St. Joseph Hospital is located south of South Boulevard on the west side of Woodward Avenue. It is currently served by Route 450 Pontiac.

Square Lake Road

- ✎ I-75 intersects with Square Lake Road east of Woodward Avenue.

Long Lake Road

- ✎ Smart Route 450 operates as non-stop service between Hickory Grove (north of Long Lake Road) and Big Beaver Road.

Big Beaver Road

- ✎ SMART 430, 460, 465 and 780 serve the Big Beaver Road area.
- ✎ Kmart headquarters, Somerset Collection Mall, the Troy Civic Center and a SMART park-and-ride lot are located west of Woodward Avenue with access to the corridor via SMART Routes 430, 460, 465 and 780.

Maple Road/15 Mile Road

- ✎ SMART Routes 405, 440, 445, and 780 serve the Maple Road area.
- ✎ To the West of Woodward Avenue, SMART Routes 405, 440, 445 and 780 provide access to the Henry Ford Medical Center, Orchard Mall and the Old Orchard Shopping Center in West Bloomfield Township.
- ✎ To the east of Woodward Avenue, SMART Routes 460 and 780 provide service to the SMART Oakland Terminal and the Kmart in Troy.

14 Mile Road

- ✎✎ SMART Route 760 serves the 14 Mile Road Area.
- ✎✎ Oakland Mall is located to the east of Woodward Avenue, accessible from SMART Route 760.
- ✎✎ A Meijer grocery store is located between 14 and 15 Mile Roads off of SMART Route 760.

13 Mile Road

- ✎✎ SMART Route 760 serves the 13 Mile Road area to the west of Woodward Avenue.
- ✎✎ A SMART park-and-ride lot, Beaumont Hospital, Northwood Shopping Center, Southfield Plaza and Home Depot are all located to the West of Woodward Avenue with access via SMART Route 760.

12 Mile Road

- ✎✎ Currently, there are no SMART routes that intersect Woodward Avenue at 12 Mile Road.
- ✎✎ Southfield Lathrup High School, the Tel-Twelve Shopping Center and Oakland Community College are all located along 12 Mile Road, west of Woodward Avenue. These locations are served by SMART Routes 405 and 740. These routes currently turn at Coolidge Road rather than continuing on to Woodward.
- ✎✎ The GM Tech Center, Home Depot, Kmart and Universal Mall are located along 12 Mile Road to the east of Woodward Avenue. These locations are served by SMART Route 740, which does intersect with Woodward Avenue at 11 Mile Road.

11 Mile Road

- ✎✎ SMART Routes 730 and 740 intersect with Woodward Avenue.
- ✎✎ The Royal Oak Transit Center, a SMART park-and-ride lot, and Oakland County Community College Royal Oak Campus are all located to the east of Woodward Avenue along Routes 730 and 740.

10 Mile Road

- ✎✎ SMART Route 730 provides service along 10 Mile Road to the west of Woodward Avenue but currently does not intersect with Woodward Avenue.
- ✎✎ The Detroit Zoo is located on 10 Mile Road on the west side of Woodward. It is served by SMART Routes 440, 450, and 460 operating on Woodward. The Zoo is also served by DDOT's Route 4 Zoo Shuttle which travels up Woodward from Warren to the Zoo. This route only operates from approximately Memorial Day through Labor Day.

9 Mile Road

- ✎✎ SMART Route 710 serves 9 Mile Road.
- ✎✎ Providence Hospital and the Oakland County Community College Southfield Campus are located on 9 Mile, west of Woodward Avenue.

8 Mile Road

- ✍✍ 8 Mile Road is served by SMART Routes 410 and 494 and DDOT Route 17.
- ✍✍ DDOT Route 53 operates between 8 Mile Road and downtown.
- ✍✍ The Northland Center is located West of Woodward Avenue. It is served by both DDOT and SMART.
- ✍✍ The Michigan State Fairgrounds are located on the east side of Woodward. DDOT has a transfer facility located at the Fair Grounds.

7 Mile Road

- ✍✍ DDOT Route 45 serves 7 Mile Road.

McNichols Road

- ✍✍ DDOT Route 32 serves McNichols Road.
- ✍✍ University of Detroit-Mercy is located on McNichols Road, west of Woodward Avenue.

Woodland

- ✍✍ Metropolitan Hospital is located west of Woodward and north of Woodland along Woodrow Wilson and is served by DDOT Route 53 which intersects with Woodward at Grand Boulevard.

Trowbridge

- ✍✍ DDOT Routes 8 and 38 provided east/west access at Trowbridge Street.

Hazelwood

- ✍✍ DDOT Route 24 intersects with Woodward at Hazelwood.
- ✍✍ DDOT Route 11 intersects with Woodward two block north of Hazelwood.
- ✍✍ Kieffer Hospital is located west of Woodward on Hazelwood.

Mount Vernon

- ✍✍ There are no routes that intersect Woodward at Mount Vernon.

Grand Boulevard

- ✍✍ DDOT Route 20 serves Grand Boulevard.
- ✍✍ DDOT Route 3 serves several Detroit hospitals located in the Woodward Corridor between Grand Boulevard and Downtown.
- ✍✍ Henry Ford Hospital is located west of the Woodward on Grand Boulevard.

Antoinette

✍✍ No routes intersect Woodward at Antoinette.

Warren

- ✍✍ DDOT Route 14 serves the Warren Avenue area at Woodward.
- ✍✍ Wayne State University is located west of Woodward as is the Detroit Historical Museum.
- ✍✍ The Detroit Institute of Arts and the Detroit Science Center are located in the area east of Woodward.
- ✍✍ DDOT Route 4 begins at Warren and Woodward and travels north to the Detroit Zoo along Woodward.

Alexandrine

✍✍ No routes intersect with Woodward at Alexandrine.

Mack

✍✍ The Detroit Receiving Hospital is located along Mack on the west side of Woodward.

Alfred

✍✍ No routes intersect with Woodward at Alfred.

I-75

- ✍✍ DDOT Routes 20 and 36 intersect with Woodward near I-75.
- ✍✍ The Fox Theater is a short distance south of the intersection of Woodward and I-75.
- ✍✍ Comerica Park, home of the Detroit Tigers Baseball Team is also nearby on the east side of Woodward. And the soon-to-be opened Ford Field, home of the National Football League Detroit Lions is just a short distance to the east.

Grand Circus Park

✍✍ There is a People Mover station at Grand Circus Park adjacent to the Whitney Building. This is the entry into the Detroit Central Business District.

Campus Martius Park

✍✍ The planned Campus Martius Park is in the center of Detroit Central Business District and is the site of the new Compuware World Headquarters Building.

Jefferson Avenue

✍✍ The Renaissance Center, home of General Motor's World Headquarters is located at the south end of Woodward where it intersects with Jefferson just a short distance north of the Detroit River and the Detroit-Windsor Tunnel.

4.3 High-Occupancy Vehicle (HOV) Concept

HOV lanes do not eliminate traffic congestion. More than anything, HOV lanes are effective in moving people and improving personal mobility. A standard test of HOV effectiveness is whether the lane carries more people than the adjacent general purpose lane. According to the Texas Transportation Institute at Texas A&M University, the optimum conditions under which HOV lanes are likely to be effective include:

- ✍✍ congestion levels — recurring peak hour speeds of 30 mph or less;
- ✍✍ travel patterns — work trips to densely developed activity centers;
- ✍✍ travel time savings and trip reliability — an HOV lane should save at least one minute per mile, with overall savings of at least five minutes and preferably more than eight minutes;
- ✍✍ trip distance — corridors with long trips are more likely to attract substantial HOV traffic;
- ✍✍ current bus and carpool volumes — a corridor with high levels of current multiple-passenger vehicles usually represents a better candidate;
- ✍✍ support facilities and services — facilities such as park-and-ride lots, direct access ramps and enforcement areas, and services such as transit and rideshare contribute significantly to the success of HOV lanes.

In this study, a high occupancy vehicle lane is being added in each direction of I-75 as the leftmost driving lane. The lane would be marked by painted diamonds on the pavement and would be limited to vehicles carrying two or more persons during peak drive times, for example, 7:00 – 9:00 a.m. and 4:00 – 6:00 p.m. (Figure 4-2). It would be freely accessible along its entire length and compliance would be enforced. To make an "apples vs. apples" test, the HOV and "general purpose" lanes are added throughout the length of I-75 in Oakland County in two separate networks.

Signing



HOV Operation



Ramp Preference



Enforcement

Figure 4-2
HOV Example Facilities

SOURCE: HOV Interactive 1.0, Federal Highway Administration, 1996

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5. Model Results

The primary purpose of the modeling effort is to assess whether either rapid transit in the Woodward Avenue corridor, or high-occupancy vehicle lanes in the I-75 corridor would obviate the need to widen I-75 for a "general purpose" lane through the 2025 target year. The analysis will, at the same time, determine whether rapid transit in the Woodward Avenue corridor holds promise as part of an overall regional transportation strategy, regardless of whether it would provide significant relief to I-75. The travel-forecasting model was applied to answer these questions.

5.1 Rapid Transit

Table 5-1 shows a summary of the results of this analysis of rapid transit in the Woodward Corridor.

Table 5-1
Rapid Transit and HOV Concepts
I-75 PM Peak Hour Characteristics (2025)

Measure	Alternatives	
	No Action	Rapid Transit
Regional Daily Transit Trips (Linked) ¹	117,682	154,667
Regional Transit Boardings (Unlinked) ²	177,285	246,440
Woodward Rapid Transit Boardings	NA	43,035
DPM Boardings	10,967	9,930

Source: The Corradino Group of Michigan, Inc.

¹Origin to destination.

²Stop to stop.

The addition of the rapid transit line would increase daily linked transit trips (origin to destination) from 117,682 in the No Action condition to 154,667; daily transit boardings (stop to stop) from 177,285 to 246,440; and, provided rapid transit service to more than 43,000 daily transit riders. This ridership level (43,000 daily boardings) is comparable to that forecast (50,000 daily boardings in 2020) in the most recent study of rapid transit in the Woodward Corridor by IBI Group.⁴

This ridership level (43,000 daily boardings) is high enough to conclude the Woodward Corridor rapid transit line merits further study. This is particularly the case up to 8 Mile Road, and maybe, one station beyond, to 9 Mile Road (Table 5-2). Further south, in the City of Detroit, the station at Michigan Avenue/Campus Martius is expected to have the highest daily volume of rider boardings/alightings in 2025 (12,219), with the Warren Avenue station forecast to have the second highest number of ons/offers (6,882). The highest daily two-way 2025 rapid transit line volume is expected to be about 22,000 riders and be sustained it from Warren Avenue south to the People Mover station at Grand

⁴ Woodward Corridor Transit Alternatives Study Final Report; Detroit Transportation Corporation; by IBI Group; May 2000.

Circus Park. Again, this number suggests rapid transit from Downtown Detroit to 8 Mile Road (maybe, 9 Mile Road) is a candidate for more analysis. But, once past 10 Mile, the rapid transit line's daily two-way ridership in 2025 drops to less than 4,000 and then to 1,000 for some distance leading to the Pontiac terminal (Table 5-2). This transit pattern does not offer relief of travel on I-75 (Table 5-3) regardless of the segment examined, because:

- ✎✎ Congestion levels on I-75 are so high that travelers in the corridor who would choose to use the new rapid transit system are quickly replaced by other auto travelers who might have previously chosen surface routes because of I-75 congestion.
- ✎✎ While the RT system and I-75 are in the same general travel corridor, they are still more than two miles apart in most locations. Moreover, "indirect" travel would be required to get to an RT station compared to driving on I-75.
- ✎✎ Most users of I-75 in Oakland County are not within walking distance of the RT system and the DDOT and SMART bus lines that feed the RT system. This is largely because of the dispersed residential development in Oakland County, and the fact that the majority of travelers on I-75 in Oakland County begins and ends its trips in Oakland County. Most Oakland County travelers with the Detroit destination would be presented with the choice of driving to an RT station and transferring, or driving the entire trip. Most travelers choose to drive the entire trip.

So, in the end, the answer is yes to the two key questions this analysis asked to address: "Is another lane needed on I-75, at least where there are only three through lanes today?" and, "Is rapid transit viable in the Woodward Corridor?"

5.2 High-Occupancy Vehicle Lane

The effectiveness of a high-occupancy vehicle (HOV) lane alternative, as described earlier, was assessed by examining the PM peak hour throughput serving vehicles with two or more people. One test assesses whether the HOV lane would carry more persons than the adjacent general purpose lane. Modeling shows this occurs along every part of the HOV facility between 8 Mile and M-15 (Table 5-4A) in the northbound (i.e., peak) direction in the PM peak hour. This suggests that the HOV lanes would be effective.

Another test is whether the HOV lanes would carry more than 700 vehicles per hour (a generally accepted measure of the viability of an HOV lane). Table 5-4A also shows that this occurs along every section of the HOV facility between 8 Mile and M-15 in the NB direction during the critical PM peak hour. North of M-15, I-75 fails both tests.

It is also important to compare the throughput of all lanes on I-75 with the addition of an HOV lane versus a general purpose lane. Again, it is noted that these lanes were added to I-75 throughout Oakland County in separate test networks to construct an "apples versus apples" comparison. In this case (Table 5-4B), the total I-75 throughput is much greater with the addition of the HOV lane rather than a general purpose lane between I-696 and M-59. Outside that section, the difference in throughput is fewer than 200 persons per hour.

Table 5-2
Daily Rapid Transit Station Activity (2025)
Woodward Corridor

Location	Access	Daily Ons + Offs	Daily 2-way Load
Pontiac Transportation Center	Auto, walk, bus	1,046	
			1,046
Square Lake Road	Auto, walk, bus	768	
			1,028
Long Lake Road	Auto, walk, bus	66	
			1,036
Big Beaver	Auto, walk, bus	62	
			1,020
Maple Road	Auto, walk, bus	73	
			1,037
14 Mile	Auto, walk, bus	143	
			1,140
13 Mile	Auto, walk, bus	1,960	
			2,750
12 Mile	Auto, walk, bus	1,655	
			3,401
11 Mile	Auto, walk, bus	479	
			3,552
10 Mile	Auto, walk, bus	902	
			4,048
9 Mile	Auto, walk, bus	5,031	
			6,835
8 Mile	Auto, walk, bus	4,905	
			10,248
7 Mile	Walk, bus	4,000	
			11,732
McNichols	Walk, bus	3,408	
			13,212
Woodland Ave.	Walk, bus	1,622	
			14,152
Trowbridge	Walk, bus	2,968	
			16,204
Hazelwood	Walk, bus	4,183	
			18,165
Mount Vernon	Walk, bus	4,829	
			19,998
Grand Boulevard	Walk, bus	3,007	
			19,793
Antoinette	Walk, bus	4,941	
			20,024
Warren	Walk, bus	6,882	
			21,608
Alexandrine	Walk, bus	3,745	
			21,731
Mack	Walk, bus	326	
			21,759
Alfred	Walk, bus	5,324	
			21,869
I-75	Walk, bus	1,593	
			20,954
Grand Circus Park	DPM, walk	4,874	
			16,130
Campus Martius	Walk, bus	12,219	
			5,059
Jefferson Ave.	Walk, bus	5,059	

Source: The Corradino Group of Michigan, Inc.

Table 5-3
Throughput at Key Segments of I-75
PM Peak Hour (2025)

	No Action	Rapid Transit
I-75 Throughput (PM Peak Hour)		
SB Genesee Co. Line to U.S. 24		
persons	3,521	3,537
vehicles	2,950	2,960
Auto occupancy	1.193	1.195
NB Genesee Co. Line to U.S. 24		
persons	4,499	4,415
vehicles	3,718	3,675
Auto occupancy	1.210	1.201
SB U.S. 24 to M-15		
persons	3,284	3,304
vehicles	2,704	2,715
Auto occupancy	1.215	1.217
NB U.S. 24 to M-15		
persons	5,170	5,087
vehicles	4,193	4,160
Auto occupancy	1.233	1.223
SB M-15 to Sashabaw		
persons	3,915	3,916
vehicles	3,171	3,173
Auto occupancy	1.235	1.234
NB M-15 to Sashabaw		
persons	6,144	6,086
vehicles	4,949	4,943
Auto occupancy	1.241	1.231
SB M-59 to Square Lake Road		
persons	9,126	9,233
vehicles	6,994	7,060
Auto occupancy	1.305	1.308
NB M-59 to Square Lake Road		
persons	9,998	9,985
vehicles	7,849	7,830
Auto occupancy	1.274	1.275
SB 14 Mile to 12 Mile		
persons	8,007	7,999
vehicles	6,085	6,082
Auto occupancy	1.316	1.315
NB 14 Mile to 12 Mile		
persons	8,190	8,180
vehicles	6,249	6,228
Auto occupancy	1.311	1.313
SB 12 Mile to I-696		
persons	10,160	10,668
vehicles	7,659	8,021
Auto occupancy	1.327	1.330
NB 12 Mile to I-696		
persons	10,172	10,406
vehicles	7,748	7,904
Auto occupancy	1.313	1.317
SB I-696 to 8 Mile		
persons	9,898	9,889
vehicles	7,374	7,340
Auto occupancy	1.342	1.347
NB I-696 to 8 Mile		
persons	10,239	10,304
vehicles	7,850	7,856
Auto occupancy	1.304	1.312
SB I-75 Travel Time (U.S. 24 to 8 Mile)	36.66	36.70
NB I-75 Travel Time (8 Mile to U.S. 24)	41.57	41.55

Source: The Corradino Group of Michigan, Inc.

Table 5-4A
2025 PM Peak Hour Throughput (Vehicles and Persons)
HOV Lane (2-plus) vs. General Purpose Lane at Key Segments of I-75

Location	Total HOV Vehicles per Hour		Person Throughput per Lane				Passes Test in PM Peak Direction (NB)
			HOV		Adjacent General Purpose		
	NB	SB	NB	SB	NB	SB	
8 Mile to I-696	1,471	1,279	3,687	3,189	1,952	1,954	Yes
I-696 to 12 Mile	1,889	1,913	4,737	4,782	1,982	1,943	Yes
12 Mile to 14 Mile	1,870	1,713	4,684	4,277	2,058	1,934	Yes
Square Lake Road to M-59	1,586	1,072	3,949	2,684	2,512	2,233	Yes
Sashabaw to M-15	892	294	2,170	725	1,604	1,096	Yes
M-15 to U.S. 24	422	245	995	598	1,516	912	No
U.S. 24 to Genesee Co. Line	422	0	995	0	1,247	1,179	No

Source: The Corradino Group of Michigan, Inc.

Note: NB is the PM Peak Direction.

Table 5-4B
2025 PM Peak Hour Person Throughput
HOV Lane (2-plus) vs. General Purpose Lane at Key Segments of I-75

Location	Add General Purpose Lane		Add HOV Lane		HOV Increase	
	NB	SB	NB	SB	NB	SB
8 Mile to I-696	11,366	6,209	11,494	5,980	129	(229)
I-696 to 12 Mile	12,300	12,679	12,923	13,014	622	336
12 Mile to 14 Mile	10,327	9,729	10,856	10,079	529	350
Square Lake Road to M-59	11,204	9,858	11,486	9,812	283	(46)
Sashabaw to M-15	6,815	3,949	6,982	4,012	168	63
M-15 to U.S. 24	5,490	3,252	5,543	3,333	53	81
U.S. 24 to Genesee Co. Line	4,742	3,525	4,736	3,536	(6)	11

Source: The Corradino Group of Michigan, Inc.

Note: NB is the PM Peak Direction.

Another test from Texas Transportation Institute (TTI) indicates that travel time savings for the HOV lanes should exceed one minute per mile. Along I-75, this does not occur, as the HOV travel time savings for the entire section between Dixie Highway (U.S. 24) and I-696, is only about three minutes in the peak northbound direction over a distance of about 28 miles. But, further examination of this test reflects it may be impractical. For example, to achieve a one-minute travel time savings per mile when vehicles in the general purpose lane have an average speed of 30 mph requires the HOV lane vehicles to average 60 mph (Table 5-5). Further, at speeds in the general purpose lane over 32 mph, the HOV vehicles have to travel at average speeds of 70+ mph. And, at such speed differences, safety will be an issue when vehicles moving into and out of the HOV lane merge/diverge with vehicles moving so much slower. So, this one-minute-per-mile standard doesn't seem practical.

Table 5-5
Speed Differences to Achieve One Minute of Travel Time Savings

Speeds to Create a One-Minute Difference	
General Purpose Lane	HOV Lane
10 mph	12 mph
15 mph	20 mph
20 mph	30 mph
25 mph	43 mph
30 mph	60 mph
31 mph	64 mph
32 mph	69 mph
33 mph	73 mph
34 mph	78 mph
35 mph	84 mph
40 mph	84 mph
45 mph	120 mph
50 mph	300 mph

Source: The Corradino Group of Michigan, Inc.

Nevertheless, the travel time savings documented in the modeling here for the HOV lane in the section of I-75 from 8 Mile Road to M-15 can be translated into cost savings of \$7.25 million over the 20-year life of the HOV lane. (This is the stream of annual cost savings in personal travel time over 20 years discounted to today's dollars at a four percent interest rate.) This is relatively small. Nevertheless, it makes the HOV concept worthy of some additional analysis at the "practical alternatives" stage of screening, which is usually undertaken prior to full EIS treatment.

One final test was made of the HOV concept to determine the effectiveness of limiting the use of the HOV lane to vehicles with three or more people. It is noteworthy that of 70 HOV projects existing in North America, four have "3-plus" HOV lanes (two in Los Angeles, one each in Seattle and Vancouver); three of these were previously "bus-only" lanes. And, of the 63 "2-plus" HOV projects, six were previously "3-plus" HOV facilities while one, in Seattle, was converted from a general purpose lane.

The results of the tests of the "3-plus" HOV concept indicate only the section of I-75 from 8 Mile to 14 Mile Roads passes the person and vehicle throughput tests (Table 5-6A). But, the entire throughput for I-75 is expected to be greater by using the additional lane for general purpose vehicles rather than HOVs (Table 5-6B). Lastly, the time savings for the 29-mile length of HOV between Dixie Highway and I-696 is about four minutes, or one minute better than the "2-plus" HOV results. These data lead the consultant to the conclusion that the "2-plus" HOV lane will be more effective over a longer section of I-75. Further, it is likely the concept that will gain more public acceptance as tests indicate twice as many vehicles will use the lane.

Table 5-6A
2025 PM Peak Hour Throughput
(Vehicles and Persons)
HOV Lane (3-plus) vs. General Purpose Lane
at Key Segments of I-75

Location	Total HOV Vehicles per Hour		Person Throughput per Lane				Passes Test in PM Peak Direction (NB)
			HOV		Adjacent General Purpose		
	NB	SB	NB	SB	NB	SB	
8 Mile to I-696	756	664	2,570	2,258	2,199	2,108	Yes
I-696 to 12 Mile	959	860	3,261	2,924	2,194	2,220	Yes
12 Mile to 14 Mile	883	717	3,002	2,438	2,412	2,340	Yes
Square Lake Road to M-59	703	459	2,390	1,561	2,944	2,746	No
Sashabaw to M-15	334	92	1,136	313	1,854	1,213	No
M-15 to U.S. 24	129	73	439	248	1,669	1,012	No
U.S. 24 to Genesee Co. Line	129	0	439	0	1,429	1,173	No

Source: The Corradino Group of Michigan, Inc.

Note: NB is the PM Peak Direction.

Table 5-6B
2025 PM Peak Hour Person Throughput
HOV Lane (3-plus) vs. General Purpose Lane
at Key Segments of I-75

Location	Add General Purpose Lane		Add HOV Lane		HOV Increase	
	NB	SB	NB	SB	NB	SB
8 Mile to I-696	11,366	6,209	11,368	5,897	2	(312)
I-696 to 12 Mile	12,300	12,679	12,036	11,805	(264)	(874)
12 Mile to 14 Mile	10,327	9,729	10,237	9,457	(90)	(272)
Square Lake Road to M-59	11,204	9,858	11,222	9,797	18	(60)
Sashabaw to M-15	6,815	3,949	6,697	3,951	(118)	2
M-15 to U.S. 24	5,490	3,252	5,445	3,285	(46)	33
U.S. 24 to Genesee Co. Line	4,742	3,525	4,725	3,519	(17)	(6)

Source: The Corradino Group of Michigan, Inc.

Note: NB is the PM Peak Direction.

() Reduction

Overall, these results are consistent (except with the travel time savings issue) with those in the Southeast Michigan High-Occupancy (HOV) Feasibility Study⁵, wherein the I-75 segment between I-696 and M-59 was considered feasible and the section north from M-59 to U.S. 24 was judged marginally feasible. These results are also consistent with the I-75 Feasibility Study in which adding a general purpose lane or an HOV facility compared very closely so that a policy decision was required. At that level of analysis, a general purpose lane was chosen to accommodate additional I-75 traffic.

⁵ *Southeast Michigan High-Occupancy Vehicle (HOV) Feasibility Study*; Michigan Department of Transportation; by Parsons Brinckerhoff Michigan, Inc.; May 1999.

6. Findings and Next Steps

Based on this travel analysis, the consultant believes that the "2-plus" HOV lane is an alternate to be examined further at the "practical alternatives" level of detail to determine if it should be carried into the EIS. And, while preliminary indications are that the HOV (2-plus) section of I-75 could extend from 8 Mile Road to M-15, a more limited extent (i.e., between I-696 and M-59) may be chosen based on additional analysis of total (i.e., the sum of all lanes) I-75 person throughput. Nevertheless, because this option could have different effects than adding a general purpose lane in areas such as right-of-way acquisition, road and interchange design, air quality, and cost, it should be tested further. In any case, another lane is needed on I-75. And, while rapid transit in the Woodward Corridor is considered viable, continuing analysis of this concept is left to the advancement of SEMCOG's Speed Link concept, as it does not alleviate the need to widen I-75.

These findings have been reviewed by the I-75 Steering Committee and Council. The results will now be offered to the general public for its input on August 21, 2002.